Small Business Innovation Research/Small Business Tech Transfer

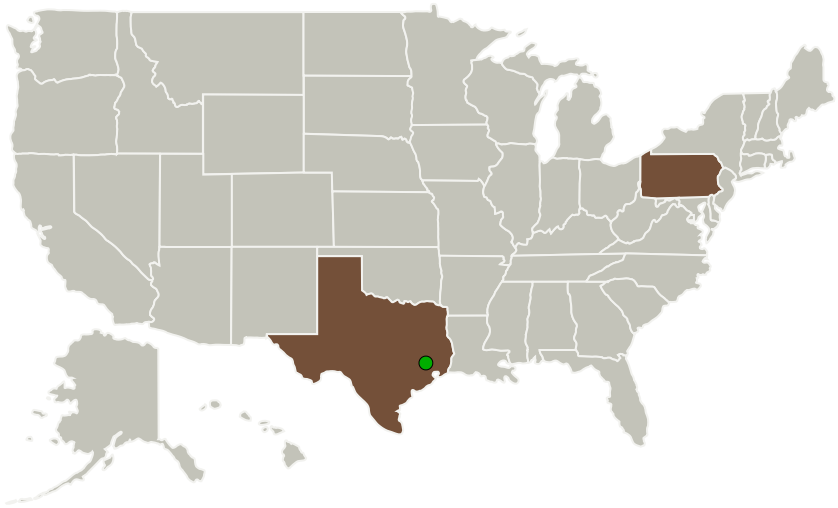
Scalable Gravity Offload System, Phase I

Completed Technology Project (2010 - 2011)

Project Introduction

The proposed innovation is a scalable gravity off-load system that enables controlled integrated testing of Surface System elements such as rovers, habitats, and space suits in planet-relevant gravity which addresses T6.02 in the direct solicitation of a gravity off-load system. Phase I delivers a nominal design in the form of a final report, Phase II builds this design and delivers hardware, and Phase III commercializes the gravity off-load system as a commercial product/service of Astrobotic Technology.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
Astrobotic Technology, Inc.	Lead Organization	Industry	Pittsburgh, Pennsylvania
Carnegie Mellon University	Supporting Organization	Academia	Pittsburgh, Pennsylvania
Johnson Space Center(JSC)	Supporting Organization	NASA Center	Houston, Texas

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Primary U.S. Work Locations	
Pennsylvania	Texas

Project Transitions

January 2010: Project Start

January 2011: Closed out

Closeout Documentation:

- Final Summary Chart*(https://techport.nasa.gov/file/140147)*

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Astrobotic Technology, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

William Whittaker

Co-Investigator:

William Whittaker

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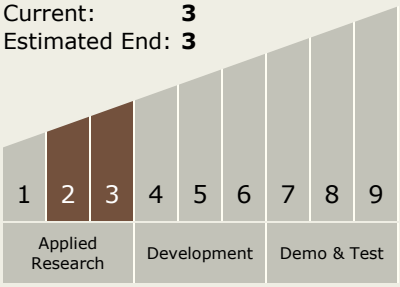
Technology Maturity (TRL)

Start: **2**
Current: **3**
Estimated End: **3**



Technology Areas

Primary:

- TX13 Ground, Test, and Surface Systems
  - TX13.4 Mission Success Technologies
    - TX13.4.6 Ground Analogs for Space/Surface Systems

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System